

REMARKS/ARGUMENTS

Reconsideration and allowance of the above-identified application are respectfully requested. Claims 1-22 remain pending.

The Examiner has rejected claims 1 and 13 as being unpatentable over U.S. Patent No. 5,761,438 to Sasaki, in view of Degermark (RFC 2507), and further in view of newly cited U.S. Patent No. 6,577,596. Applicants respectfully traverse the rejection, because the references, even taken together, fail to teach or suggest the claimed features of independent claims 1 and 13.

The Examiner alleges that Sasaki teaches method for transmitting compressed packet data in a packet communication network, comprising the steps of: determining an operating state of the network and deciding a period for transmitting a full packet based on said operating state, and transmitting full packets during periodic transmission times according to the decided packet transmission period and transmitting uncompressed packets during other transmission times.

Even if Sasaki teaches what the Examiner suggests, this is not what is claimed. In the prior paper filed June 26, 2007, Applicants amended claims 1 and 13 to clarify that the method of claim 1 includes transmitting full packets *having uncompressed headers* at periodic transmission times according to the decided full-packet transmission period, and transmitting compressed packets *having compressed headers* during other transmission times. Applicants have amended claims 1 and 13 to clarify that the uncompressed headers are transmitted *at* periodic transmission times, rather than *during* periodic transmission times. Entry of the amendment is kindly requested

since it is intended merely to clarify the claim, and does not alter the scope of the claim or require additional search by the Examiner.

As discussed in the specification, it is the compressed *headers* of transmitting packets which causes delays when packets are lost in transmission. Accordingly, it is desirable to transmit fewer *compressed packets* during times when more packets are lost or damaged, so that retransmission of packets may be minimized. Sasaki is directed to a completely different problem – overall capacity in a congested network, and Sasaki solves the problem of capacity by determining whether to compress data and which compression method to use based on a busy state of the network. The capacity problem is addressed by transmitting *less data*.

The Examiner's reliance on Sasaki is misplaced for at least two reasons. First, Sasaki is not concerned with a determination of whether or how often to compress *packet headers*, as claimed. Second, Sasaki teaches directly away from the present invention by suggesting that the solution to network congestion is to transmit less data. Embodiments of the present invention solve a different problem – overcoming the need for multiple packets to be retransmitted if even a single packet was lost if compressed headers were used – by compressing *packet headers* less often when the network is more congested (i.e. the packet retransmission ration is higher), such that fewer packets need to be retransmitted when one is lost.

Degermark fails to make up for the deficiencies in Sasaki described above. Degermark is merely the RFC 2507 document, which describes the compressed header transmission method, but fails to discuss any method of adjusting the uncompressed packet header transmission period.

Olsson is cited by the Examiner as teaching that if the operating state of the network is determined to be congested, the period for transmitting a full packet is set to be small, such that uncompressed headers are transmitted more often. However, Olsson at most describes a process of determining whether packet queue's are full. This is a determination of whether the *transmitting device* is busy, *not* the operating state of the network, as claimed. As described in the specification of the present application, embodiments of the present invention can determine the operating state of the network according to the ration of *retransmitted packets* to *transmitted packets*. Packets are retransmitted when they are lost or damaged, as in, for example, a noisy radio link. This is much different than a queue in a transmitting device being full, as in Olsson. Accordingly, Olsson does not teach or suggest the feature for which the Examiner relies on it.

Accordingly, none of the cited references, either alone or in combination, teach the unique method and apparatus claimed in independent claims 1 and 13. Namely, the references taken together, fail to teach or suggest determining *an operating state of the network* and deciding a period for transmitting a full packet based on said operating state; and transmitting full packets *having uncompressed headers* at periodic transmission times according to the decided full-packet transmission period, and transmitting compressed packets *having compressed headers* during other transmission times; wherein if the *operating state of the network* is determined to be congested, the period for transmitting a full packet is set to be small such the *uncompressed headers* are transmitted more often when the network is more congested.

The Examiner has rejected claims 2-12 and 14-22 over various combinations of references. However, none of the additional references make up for the deficiencies described above with respect to Independent claims 1 and 13. Accordingly, claims 2-12 and 14-22 are allowable for at least the reasons described above with respect to claims 1 and 13.

In view of the above, it is believed that the application is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number indicated below.

Respectfully Submitted,


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